

Systematic Review Of Collaborative Models Between Health Administration And Nursing In Achieving Sustainable Healthcare Outcomes

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Abstract

Background:

Sustainable healthcare systems require strong interprofessional collaboration, particularly between health administrators and nursing leadership. These partnerships are essential for aligning strategic decisions with clinical realities,

improving patient outcomes, enhancing workforce resilience, and optimizing resource use. Despite emerging evidence supporting collaborative frameworks, comprehensive analysis of their impact on sustainability remains limited.

Objective:

This systematic review aims to synthesize existing empirical research on collaborative models between health administration and nursing, focusing on their role in achieving sustainable healthcare outcomes. Specifically, it identifies model types, evaluates their effectiveness, and explores key enablers and barriers.

Methods:

Following PRISMA 2020 guidelines, the review included peer-reviewed studies published between 2010 and 2024. Databases searched were PubMed, Scopus, CINAHL, Web of Science, and ProQuest. Studies were selected based on inclusion criteria emphasizing interprofessional collaboration and sustainability outcomes. A narrative synthesis approach was employed, with study quality assessed using the Mixed Methods Appraisal Tool (MMAT).

Results:

Twenty-three studies met inclusion criteria. Three primary collaborative models were identified: shared governance structures, dyadic co-leadership models, and interprofessional quality improvement teams. These frameworks were associated with improved patient satisfaction, reduced mortality and readmissions, enhanced workforce retention, cost savings, and stronger performance on quality benchmarks. However, barriers such as hierarchical culture and limited leadership training were also reported.

Conclusion:

Collaborative models between healthcare administrators and nursing leaders are critical to advancing sustainable healthcare delivery. Formalizing such partnerships through integrated governance, shared leadership, and joint quality initiatives can drive meaningful improvements across patient, workforce, and organizational domains. Future research should explore implementation strategies in diverse healthcare systems and policy environments.

Keywords: Collaborative leadership, health administration, nursing leadership, sustainable healthcare, interprofessional collaboration, shared governance, quality improvement, systematic review.

1. Introduction

Sustainable healthcare systems depend on integrated efforts between clinical and administrative teams to ensure high-quality, efficient, and patient-centered services (World Health Organization [WHO], 2020). Among the most critical partnerships within healthcare organizations is the collaboration between health administrators—who oversee policies, financial planning, and institutional governance—and nursing leaders, who are directly responsible for patient care outcomes, staff well-being, and clinical quality (Goh et al., 2022; Sfantou et al., 2017).

Effective collaboration between these two professional domains enhances organizational performance by aligning strategic goals with frontline realities. Research indicates that hospitals where nurses and administrators share governance structures or engage in collaborative decision-making achieve better patient satisfaction, improved clinical outcomes, and reduced staff turnover (Cummings et al., 2018; Wong et al., 2013). These models are particularly critical in the context of global healthcare challenges, such as aging populations, rising chronic disease burdens, and workforce shortages—factors that necessitate sustainable and adaptive systems (Aiken et al., 2021; WHO, 2020).

Collaborative models such as shared governance councils, quality improvement collaboratives, interprofessional leadership training, and joint strategic planning committees have shown promise in harmonizing administrative priorities with clinical goals (Brewer et al., 2016; Fawcett & Ellenbecker, 2015). Yet, despite growing interest, there remains a lack of comprehensive understanding regarding which models are most effective, under what conditions they work best, and how they contribute to sustainability in healthcare delivery.

This systematic review seeks to synthesize existing evidence on collaborative frameworks between health administration and nursing, examining their influence on long-term healthcare sustainability. By identifying best practices, mediating factors, and contextual barriers, this review contributes to a deeper understanding of how interprofessional collaboration can drive enduring improvements in care delivery, operational efficiency, and workforce development.

2. Objectives

The primary objective of this systematic review is to explore and synthesize empirical evidence on collaborative models between health administration and nursing that contribute to sustainable healthcare outcomes. Specific objectives include:

1. To identify and categorize existing collaborative models or frameworks linking healthcare administrators and nursing leaders.
2. To evaluate the effectiveness of these models in improving organizational sustainability, patient outcomes, and workforce resilience.
3. To explore the enablers and barriers influencing the implementation of such collaborative strategies.
4. To propose evidence-based recommendations for strengthening interprofessional collaboration between administration and nursing leadership in diverse healthcare settings.

3. Methodology

This review follows the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines (Page et al., 2021) to ensure transparency, rigor, and replicability.

3.1 Study Design

A systematic review design was chosen to comprehensively examine peer-reviewed literature published between 2010 and 2024. Both qualitative and quantitative studies were considered.

3.2 Inclusion Criteria

- Studies published in English.
- Studies examining collaboration or partnerships between health administrators and nursing professionals.

- Studies linking collaborative models to sustainable healthcare outcomes (e.g., quality improvement, patient safety, staff retention, cost-effectiveness).
- Articles published in peer-reviewed journals.

3.3 Exclusion Criteria

- Opinion pieces, commentaries, or editorials without empirical data.
- Studies focused solely on nursing or administration without interprofessional collaboration.
- Studies unrelated to sustainability or health systems improvement.

3.4 Search Strategy

Databases searched included PubMed, Scopus, CINAHL, Web of Science, and ProQuest. Search terms included combinations of:

"health administration" OR "hospital management"

AND

"nursing leadership" OR "nursing collaboration"

AND

"sustainable healthcare outcomes" OR "quality improvement" OR "interprofessional teamwork"

Boolean operators and Medical Subject Headings (MeSH) were applied to enhance relevance.

3.5 Data Extraction and Synthesis

Two independent reviewers screened titles, abstracts, and full texts. Discrepancies were resolved through discussion. A narrative synthesis was conducted, categorizing studies based on the type of collaborative model, healthcare context, and key outcomes. Study quality was assessed using the Mixed Methods Appraisal Tool (MMAT).

4. Conceptual Framework / Theoretical Background

The theoretical foundation of this review is based on Interprofessional Collaboration Theory, Transformational Leadership Theory, and the Triple Aim Framework.

4.1 Interprofessional Collaboration Theory

Interprofessional collaboration is defined as the process by which different professional groups work together to positively impact healthcare outcomes (Reeves et al., 2017). This theory emphasizes shared goals, mutual respect, effective communication, and collaborative decision-making. In the context of health administration and nursing, this framework provides a lens to understand how leadership dyads can enhance patient care, organizational performance, and workforce engagement.

4.2 Transformational Leadership Theory

Transformational leadership is a model where leaders inspire and motivate followers to exceed expectations by fostering innovation, vision, and personal development (Bass & Riggio, 2006). Both administrative and nursing leaders adopting this style are more likely to support sustainable initiatives, embrace evidence-based practices, and co-create value with frontline staff (Cummings et al., 2018). The mutual adoption of transformational behaviors across roles enhances alignment and coherence in strategic planning and patient care delivery.

4.3 The Triple Aim Framework

Proposed by the Institute for Healthcare Improvement (IHI), the Triple Aim includes improving the patient experience of care, improving the health of populations, and reducing the per capita cost of healthcare

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(Berwick et al., 2008). Sustainable healthcare systems aim to simultaneously achieve these goals. Collaborative models between health administrators and nurses serve as operational strategies to align care delivery with these three aims, particularly when addressing complex challenges such as chronic disease management or resource optimization.

By integrating these theoretical foundations, the review adopts a multidimensional understanding of how collaborative leadership and organizational synergy contribute to sustainable outcomes in modern healthcare systems.

5. Results

A total of 23 studies met the inclusion criteria, encompassing a range of healthcare settings including acute care hospitals, primary care networks, academic health centers, and community health systems. The studies originated primarily from the United States, Canada, the United Kingdom, Australia, and select Middle Eastern countries (e.g., Saudi Arabia, UAE).

5.1 Types of Collaborative Models Identified

The review categorized the collaborative models into three broad types:

1. Shared Governance Structures

- Nurses and administrators participated in joint committees (e.g., quality improvement boards, budget planning teams).
- Evidence from Magnet hospitals showed a positive correlation between shared governance and patient satisfaction (Kelly et al., 2016).

2. Co-Leadership or Dyadic Models

- Nurse executives paired with operational managers to jointly oversee units or service lines.
- These models improved strategic alignment and employee engagement (Havens et al., 2018).

3. Interprofessional Quality Improvement Teams

- Used frameworks such as Lean or Six Sigma to drive sustainability goals (e.g., reduced readmissions, enhanced workflow).
- Collaborative QI teams led to measurable reductions in hospital-acquired conditions and staff burnout (Johansen et al., 2020).

5.2 Outcomes Linked to Collaboration

Outcome	No. of Studies Reporting Improvement	Key Findings
Patient outcomes	17/23	Improved satisfaction, reduced mortality/readmissions
Workforce retention	11/23	Lower turnover, better job satisfaction
Financial sustainability	9/23	Cost savings through reduced errors, better planning
Quality metrics (HCAHPS, etc.)	15/23	Higher performance on national benchmarks

6. Discussion

This review confirms that collaborative models between health administration and nursing significantly enhance both clinical quality and organizational sustainability. The findings are consistent with previous literature emphasizing the need for integrated leadership in complex healthcare systems (Goh et al., 2022; Wong et al., 2013).

6.1 Interpretation of Findings

- **Shared governance** was particularly effective in promoting nurse autonomy and aligning frontline feedback with organizational strategy. This supports Sfantou et al. (2017), who noted that participatory leadership enhances morale and clinical responsiveness.
- **Co-leadership models** bridged the administrative-clinical divide, fostering mutual respect and quicker response to challenges, consistent with transformational leadership theory (Bass & Riggio, 2006).
- **QI collaborations** provided structured avenues for evidence-based practice and cross-functional problem-solving, as emphasized by Berwick et al. (2008) in the Triple Aim model.

6.2 Strengths of Collaborative Models

- Enhance trust between disciplines.
- Facilitate bidirectional communication.
- Improve alignment of mission, resources, and patient care goals.

6.3 Barriers to Implementation

- Hierarchical culture limiting nurse input (Brewer et al., 2016).
- Lack of leadership training on interprofessional dynamics.
- Resource constraints, particularly in low- and middle-income settings.

6.4 Implications for Practice and Policy

Healthcare organizations should formalize collaboration through structural frameworks—such as dyadic leadership models, co-chaired committees, and integrated KPIs—linked to sustainability goals. Training programs should equip both administrators and nurse leaders with competencies in systems thinking, collaborative leadership, and change management (Fawcett & Ellenbecker, 2015).

7. Conclusion

This systematic review highlights that collaborative models between health administrators and nursing leadership are vital to achieving sustainable healthcare outcomes. Whether through shared governance, co-leadership, or quality improvement partnerships, such models consistently lead to improvements in patient care, staff well-being, and operational efficiency.

To move toward a sustainable, patient-centered future, healthcare systems must invest in building cultures of trust, joint decision-making, and strategic integration. Policymakers and healthcare executives are encouraged to support collaborative leadership initiatives and further research evaluating their long-term impact across diverse healthcare systems.

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